

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**Kari Härkönen, Mark Doczy,
Teemu Lang and Nathan E. Baxter**

Confirmation No. 9896

Application No. 10/642,426

Filed: August 15, 2003

For: **DEPOSITION OF CARBON-AND
TRANSITION METAL-CONTAINING
THIN FILMS**

Group Art Unit: 1762

Examiner:

Date: June 15, 2004

INFORMATION DISCLOSURE STATEMENT

TO THE COMMISSIONER FOR PATENTS:

1. Pursuant to the duty of disclosure, documents listed on the accompanying Form PTO-1449 (or equivalent) are presented for the Examiner's consideration.

☐ Copies of listed documents are enclosed. (37 CFR § 1.98(a))


☒ Copies of listed U.S. patent documents are omitted because this application was filed after June 30, 2003 and is, thus, subject to image file wrapper processing. Copies of listed foreign patent documents and non-patent literature are enclosed.

☐ Copies of the documents listed on sheet(s) _____ of Form PTO-1449 (or equivalent) are omitted because (1) they are already of record in U.S. Patent Application No. _____, filed _____, on which this application relies for an earlier filing date under 35 U.S.C. § 120; and (2) any information disclosure statement filed in the prosecution of Application No. _____, complies with 37 CFR §§ 1.98(a) through (c). (37 C.F.R. § 1.98(d))
2. ☒ The Examiner's attention is directed to the enclosed copy of copending U.S. Patent Application No. 10/641,848 of Mark Doczy et al., filed August 15, 2003, for TRANSITION METAL ALLOYS FOR USE AS A GATE ELECTRODE AND DEVICES INCORPORATING THESE ALLOYS, which is cited in this application.
3. This information disclosure statement is being submitted (check box a., b., or c.):
 - a. ☒ Within three months of the filing date of a national application or entry of the national stage in an international application; or before the mailing of a first Office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. (No statement under 37 CFR 1.97(e) is required.); or

- b. ☐ After the period set forth in paragraph 3a, but before the mailing date of either a final action, a notice of allowance, or an action that otherwise closes prosecution in the application. (Check box i. or ii.)
- i. ☐ A \$180.00 information disclosure statement submission fee set forth in 37 CFR 1.17(p) is enclosed, or
- ii. ☐ A statement specified by 37 CFR 1.97(e) is set forth below; or
- c. ☐ After the mailing date of a final action or notice of allowance and on or before payment of the issue fee. A statement specified by 37 CFR 1.97(e) is set forth below. Enclosed is a \$180.00 information disclosure statement processing fee set forth in 37 CFR 1.17(p).
4. If a statement specified by 37 CFR 1.97(e) is required, the attorney or agent signing below hereby states that:
- ☐ each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or
- ☐ no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement.
5. ☐ A concise explanation of the relevance of each document not in the English language and/or selected documents in the English language is set forth below.

Respectfully submitted,

Planar Systems, Inc.

By 
Kassim M. Ferris
Registration No. 39,974

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Attorney Docket No. 11429/19:2



Complete if Known

(Use as many sheets as necessary)

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Application Number	10/642.426
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Filing Date	August 15, 2003
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First Named Inventor	Kari Harkonen
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Art Unit

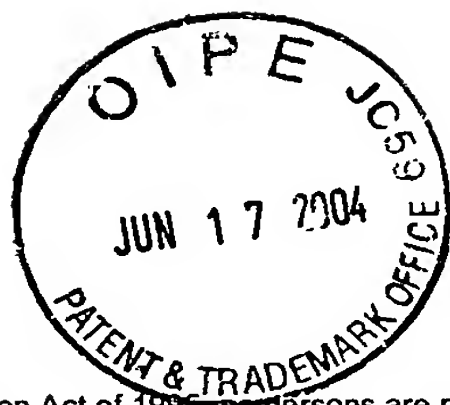
Examiner Name

Attorney Docket Number	11429/19:2
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[illegible][illegible]Date
Considered

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PTO/SB/08b(05-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/642,426
Filing Date	August 15, 2003
First Named Inventor	Kari Harkonen
Art Unit	
Examiner Name	
Attorney Docket Number	11429/19:2

Sheet 2 of 2

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	7	MARIKA JUPPO, "Atomic Layer Deposition of Metal and Transition Metal Nitride Thin Films and In Situ Mass Spectrometry Studies," Univ. of Helsinki, Faculty of Science, Dept. of Chemistry, Laboratory of Inorganic Chemistry, Academic Dissertation, December 14, 2001, 65 pages, Helsinki, Finland.	
	8	PETER ETTMAYER & WALTER LENGAUER, "Nitrides: Transition Metal Solid State Chemistry," Encyclopedia of Inorganic Chemistry, 1994 (R. Bruce King, ed.), pgs. 2498-2515, Vol. 5, John Wiley & Sons, West Sussex, England.	
	9	PETER ETTMAYER & WALTER LENGAUER, "Carbides: Transition Metal Solid State Chemistry," Encyclopedia of Inorganic Chemistry, 1994 (R. Bruce King, ed.), pgs. 519-531, Vol. 5, John Wiley & Sons, West Sussex, England.	
	10	T. SUNTOLA and M. SIMPSON, "Atomic Layer Epitaxy," 1990, pgs. 18-21 and 38-39, Blackie and Son Ltd., Glasgow and London, England.	
	11	U.S. Patent Application No. 10/641,848, filed 08/15/2003.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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